In a further form the invention might be said to reside a method of generation tissue in a mammal comprising the step of enriching a population of precursor cells as in the first aspect of the invention, and introducing the enriched population into the mammal, and allowing the enriched population to generate the tissue in the mammal.

Another potential use for enriched cells of the present invention is as a means of gene therapy, by the introduction of exogenous nucleic acids for expression of therapeutic substances in the tissue types concerned.

In the context of the present invention the term isolated cell may mean that perivascular MPCs comprise at least 30, 40, 50, 60, 70, 80, or 95% of total cells of the population in which they are present.

EXAMPLE 1 Isolation and expansion of precursor cells

Stem cell niches identified in a number of different adult tissues including skin, hair follicles, bone marrow, intestine, brain, pancreas and more recently dental pulp, are often highly vascularized sites.[1] The maintenance and regulation of normally quiescent stem cell populations is tightly controlled by the local microenvironment according to the requirements of the host tissue.[2,3] Both the supportive connective tissues of bone marrow and dental pulp contain stromal stem cell populations with high proliferative potentials capable of regenerating their respective microenvironments with remarkable fidelity, including the surrounding mineralized structures of bone and dentin.[4,5] In the postnatal organism, bone marrow stroma exists as a loosely woven, highly vascularized tissue that supports and regulates hematopoiesis.[6-8] At a time when many tissues have lost or decreased their ability to regenerate, adult bone marrow retains a capacity for continuous renewal of haematopoietic parenchymal tissue and is responsible for remodeling the adjoining bone surfaces.[9,10] In contrast, the inner pulp chamber of teeth is comprised of a non-hematopoietic, compact fibrous tissue, infiltrated by a microvascular network, that is